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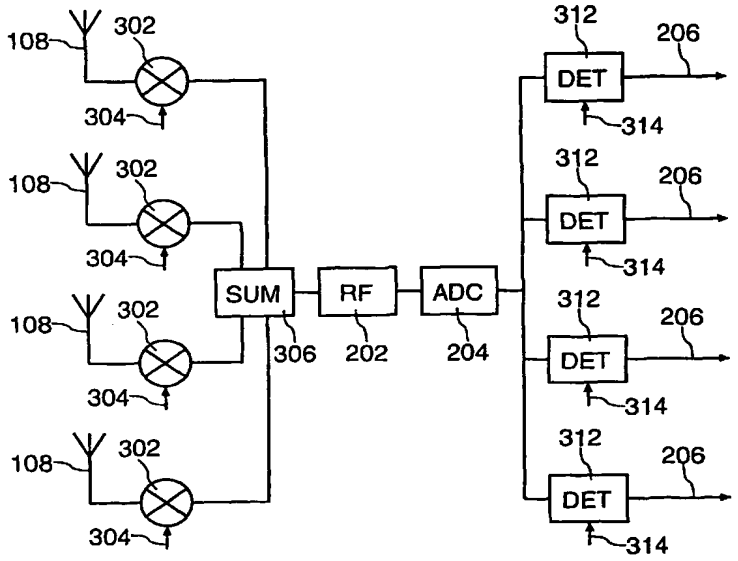
(54) Title: RECEIVER AND METHOD OF OPERATION THEREOF



(57) Abstract: A receiver comprises a plurality of antennas (108) for receiving signals originally transmitted as a plurality of different signals, for example from a MIMO (Multi-Input Multi-Output) transmitter. The receiver includes a plurality of coders (302) for applying a respective unique code to each received signal and a summer (306) for combining the coded signals into a single signal which is then down-converted by a single frequency translation stage (202) and digitised. An output signal corresponding to each received signal is obtained by a plurality of detectors (312) with reference to the codes used by the coders. In a preferred embodiment, the unique codes are orthogonal codes such as Walsh codes. The receiver enables a single frequency translation stage to be used to process a plurality of received signals, thereby both saving hardware and reducing the receiver's power consumption.

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